

REMARKS

With this amendment, the limitations of claim 14 have been added to claim 1 and the limitations of claim 24 have been added to claim 17. In addition, unnecessary limitations in claims 1 and 17 have been removed. Claim 15 has been amended to depend from claim 1 and claim 25 has been amended to depend from claim 17.

Claims 6, 7, 13, 14, 16, 21-24, 26 and 27 have been cancelled.

In the Office Action, claims 1, 3, 14, 17, 19, and 24 were rejected under 35 U.S.C § 102(b) as being anticipated by Parulski et al. (U.S. Patent No. 5,563,658, hereinafter Parulski). Claims 1, 2, 17 and 18 were rejected under 35 U.S.C § 102(b) as being anticipated by Takayama (U.S. Patent No. 5,260,774). Claim 5 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Takayama in view of Shapiro et al. (U.S. Patent No. 6,489,989, hereinafter Shapiro).

As amended, independent claim 1 provides a method in which a pre-capture function is performed on image data for a first frame of light and on a portion of a second set of image data for a second frame of light. The results of these two pre-capture processing functions are compared to each other. Final image data is then generated by modifying the second set of image data.

The invention of claim 1 is not shown or suggested in Parulski, Takayama or Shapiro. In particular, none of these references modify a second set of image data to form final image data while also performing a pre-capture function on a portion of the second set of image data and comparing the results of that function to those obtained by performing the pre-capture function on a first set of image data.

In particular, Parulski does not show the invention of claim 1. Although Parulski does compare function results from

two separate sets of image data, it does not modify either of those sets of image data to form the final image data. Instead, Parulski iteratively collects image data, determines contrast values, and adjusts the focus until the focus is as sharp as possible. Once the focus is set, Parulski performs a further step of capturing the final image data. "The shutter 24 is again opened to capture the final image, and closed while the final image is read out." (Parulski, Col. 6, lines 22-23).

In contrast, claim 1 does not require another set of image data to be captured, but instead modifies the second set of image data to form the final image data. As such, claim 1 is not anticipated by Parulski.

In addition, claim 1 is not obvious from Parulski because it would not be obvious to modify Parulski to perform the invention of claim 1. Under Parulski, the image sensor is "fast flushed" during the focus adjustment. This results in poor image data being collected for a majority of the image. In fact, Parulski says the image data outside of a center band is "unusable". (Purlaski, Col. 6, line 37).

Since this data is unusable, those skilled in the art would not attempt to use it to form the final image data as is done in the present invention. As such, the invention of claim 1 is not obvious from Purlaski.

Independent claim 17 is also patentable over the cited art. In claim 17, a camera includes a comparison component that is capable of comparing the results of performing the same pre-capture function on the image data for a first frame of light and on a portion of the image data for a second frame of light. In addition, the camera includes an image production component that is capable of producing final image data by modifying the image data acquired for the second frame of light.

As noted above, none of the cited references show or suggest comparing the results of a function applied to a portion

of image data for a second frame of light while also modifying the image data for the second frame of light to form final image data.

In light of the above remarks, independent claims 1 and 17, and claims 2, 3, 5, 15, 18, 19 and 25, which depend therefrom are patentable over the cited art. In addition, if the Examiner considers claims 1 and 17 to be in form for allowance, withdrawn claims 4, 8-12, and 20 would be linked by a common independent claim and would also be in form for allowance. As such, reconsideration and allowance of pending claims 1-3, 5, 15, 17-19 and 25 and withdrawn claims 4, 8-12, and 20 is respectfully requested.

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

WESTMAN, CHAMPLIN & KELLY, P.A.

By:


Theodore M. Magee, Reg. No. 39,758
Suite 1600 - International Centre
900 Second Avenue South
Minneapolis, Minnesota 55402-3319
Phone: (612) 334-3222 Fax: (612) 334-3312

tmm